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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,486	08/10/2001	Shingo Eguchi	12732-067001	2842
26171	7590	10/20/2004	EXAMINER	
FISH & RICHARDSON P.C. 1425 K STREET, N.W. 11TH FLOOR WASHINGTON, DC 20005-3500			SEFER, AHMED N	
			ART UNIT	PAPER NUMBER
			2826	

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/925,486

**Applicant(s)**

EGUCHI ET AL.

**Examiner**

A. Sefer

**Art Unit**

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-27 is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/1/04 has been entered.

### ***Allowable Subject Matter***

2. The indicated allowability of claims 9-12 is withdrawn in view of the newly discovered reference(s) to Kimura et al. ("Kimura") USPN 6,789,910 and Fujimoto et al. ("Fujimoto") US PG-Pub 2002/0028544. Rejections based on the newly cited reference(s) follow.
3. Claims 13-27 are allowed.

### ***Drawings***

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recitation of claims 1 and 5 "... and connected with a third electrode through a second contact hole," must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

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must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

6. Claims 1-4 are rejected under 35 U.S.C. 102(e) as being anticipated by Kimura.

The applied reference has a common assignee/inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived

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from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Kimura discloses in figs. 14-16 a semiconductor device comprising: a first electrode 836; an insulating film 865 formed on said first electrode; a contact hole (unnumbered) which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 871 which is formed on said insulating film and connected with said first electrode through said contact hole and connected with a third electrode 838 through a second contact hole; a second electrode (portion(s) of numeral 874 in contact with reference numerals 872/873) or a pixel electrode (as in claim 3) provided on said insulating film; and a liquid crystal layer 907 provided over said second electrode, wherein said first electrode overlaps with said second electrode with said insulating film interposed therebetween.

As to claim 2, Kimura discloses a pixel electrode 874 formed on said insulating film and said second electrode is in contact with said pixel electrode.

As for claim 4, Kimura discloses a semiconductor device being incorporated into electronic equipment selected from the group consisting of a personal computer, a video camera, a mobile computer, a digital camera and other various electronic equipments.

7. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujimoto.

The applied reference has a common assignee/inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived

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from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Fujimoto discloses in figs. 6-11 a semiconductor device comprising: a first electrode 153; an insulating film 174 formed on said first electrode; a contact hole (unnumbered) which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 182 which is formed on said insulating film and connected with said first electrode through said contact hole and connected with a third electrode 153 through a second contact hole; a second electrode 183/191 or a pixel electrode (as in claim 3) provided on said insulating film; and a liquid crystal layer provided over said second electrode, wherein said first electrode overlaps with said second electrode with said insulating film interposed therebetween.

As to the said second electrode being provided so as to block an electric field by said first electrode to said liquid crystal layer recited in the claim, a recitation of an intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

8. Claims 5-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Kimura

Kimura discloses in figs. 14-16 a semiconductor device comprising: a semiconductor film 805/806, a gate insulating film 807 formed on said semiconductor film; a first electrode 836/838 on said gate insulating film and overlaps said semiconductor film; an insulating film 864/865 formed on said first electrode; a contact hole (unnumbered) which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 871 which is formed on said

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insulating film and connected with said first electrode through said contact hole; a second electrode (portion(s) of numeral 874 in contact with reference numerals 872/873) or a pixel electrode (as in claim 7) provided on said insulating film; and a liquid crystal layer 907 provided over said second electrode, wherein said first electrode overlaps with said second electrode with said insulating film interposed therebetween.

As for claim 6, Kimura discloses a pixel electrode 874 formed on said insulating film and said second electrode is in contact with said pixel electrode.

As for claim 8, Kimura discloses a semiconductor device being incorporated into electronic equipment selected from the group consisting of a personal computer, a video camera, a mobile computer, a digital camera and other various electronic equipments.

9. Claims 5 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujimoto.

Fujimoto discloses in figs. 6-11 a semiconductor device comprising: a semiconductor film 105/106, a gate insulating film 107 formed on said semiconductor film; a first electrode 153 on said gate insulating film and overlaps said semiconductor film; an insulating film 173/174 formed on said first electrode; a contact hole (unnumbered) which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 182 which is formed on said insulating film and connected with said first electrode through said contact hole and connected with a third electrode 153 through a second contact hole; a second electrode 191/183 or a pixel electrode (as in claim 7) provided on said insulating film; and a liquid crystal layer provided over said second electrode, wherein said first electrode overlaps with said second electrode with said insulating film interposed therebetween.

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As to the said second electrode being provided so as to block an electric field by said first electrode to said liquid crystal layer recited in the claim, a recitation of an intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

10. Claims 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kimura.

Kimura discloses in figs. 14-16 semiconductor device comprising: a first semiconductor film 805; a second semiconductor film 806; a gate insulating film 807 provided on said first semiconductor film and said second semiconductor film; a first electrode 836 which is provided on said gate insulating film, intersects said first semiconductor film, and overlaps said second semiconductor film; an insulating film 864/865 formed on said first electrode; a contact hole (unnumbered) which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 871 which is formed on said insulating film and connected with said first electrode through said contact hole; a second electrode (portion(s) of numeral 874 in contact with reference numerals 872/873) or a pixel electrode (as in claim 11) provided on said insulating film; and a liquid crystal layer 907 provided over said second electrode; wherein said first electrode overlaps with said second electrode with said insulating film interposed therebetween.

As for claim 10, Kimura discloses a pixel electrode 874 formed on said insulating film and said second electrode is in contact with said pixel electrode.



As for claim 12, Kimura discloses a semiconductor device being incorporated into electronic equipment selected from the group consisting of a personal computer, a video camera, a mobile computer, a digital camera and other various electronic equipments.

11. Claims 9 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Fujimoto.

Fujimoto discloses in figs. 6-11 semiconductor device comprising: a first semiconductor film 105; a second semiconductor film 106; a gate insulating film 107 provided on said first semiconductor film and said second semiconductor film; a first electrode 153 which is provided on said gate insulating film, intersects said first semiconductor film, and overlaps said second semiconductor film; an insulating film 173/174 formed on said first electrode; a contact hole (unnumbered) which is provided in said insulating film and has a depth so as to reach said first electrode; a gate wiring 182 which is formed on said insulating film and connected with said first electrode through said contact hole; a second electrode 183/191 or a pixel electrode (as in claim 11) provided on said insulating film; and a liquid crystal layer provided over said second electrode; wherein said first electrode overlaps with said second electrode with said insulating film interposed therebetween.

As to the said second electrode being provided so as to block an electric field by said first electrode to said liquid crystal layer recited in the claim, a recitation of an intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (571) 272-1921.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn can be reached on (571) 272-1915.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SUPERVISORY PATENT EXAMINER  
NATHAN J. FLYNN

ANS  
October 5, 2004

